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METHOD OF PROVIDING AN ELECTROLUMINESCENT COATING SYSTEM FOR A VEHICLE AND AN ELECTROLUMINESCENT COATING SYSTEM THEREOF

ABSTRACT OF THE DISCLOSURE

An electroluminescent (EL) coating system for a vehicle and a method of providing the EL coating system are disclosed. A dielectric coating composition is applied to a conductive substrate, such as an automotive body panel. Application of the dielectric coating composition, which includes an EL phosphor, forms a dielectric film layer on the substrate. A conductive coating composition, which includes an electroconductive additive, is applied to the dielectric film layer to form a conductive film layer on the dielectric film layer. The dielectric coating composition is disposed between the substrate and conductive film layer such that the conductive film layer remains spaced from the substrate. The EL phosphor in the dielectric film layer is excitable by an electrical field established across the dielectric film layer. As such, the coating system of the vehicle is EL, or 'electroluminesces,' upon application of an electrical charge to the substrate and the conductive film layer.